

ITEM OF INTEREST

U.S. ARMY CORPS OF ENGINEERS

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CRREL reaches 200th snow assessment milestone for Iraq, Afghanistan and Pakistan watersheds

Since the winter of 2004-05 CRREL's Snow Assessment Team has produced 85 snow assessments of the Tigris and Euphrates Watersheds, 80 of the major Afghanistan watersheds, 22 of the major snow impacted watersheds of Pakistan, and 13 special snow assessments for the 10th MTN Division. Each assessment includes snow covered area (SCA) maps at regional and watershed scales; current snowpack total Snow Water Equivalent (SWE) for each watershed with an historical perspective; snow condition outlook by watershed; general summary of snow conditions based on remote sensing products and limited ground-based observations; and if warranted, a snow melt flooding advisory.

Experience has shown that quantitative snow information, such as total Snow Water Equivalent for a watershed, in itself, has relatively little operational value unless it can be placed into an historical context. The snow assessments provides users with historical context so that the total SWE volume can be placed as "above normal", "normal", or "below normal" and compared to historical extremes and the previous year's value. Historical SWE data (1987-present), derived from passive microwave satellite measurements, was used to determine the historical mean, normal ranges and extremes for each day of the winter season. The data provides a viable planning tool since personnel are normally assigned for only one year and are otherwise unable to determine if snow conditions are routine.

Current members of the snow assessment team are Carrie Vuyovich, Steve Newman, Tim Baldwin, Eli Deeb, and John Gagnon. Past members include Sue Bigl, Elke Ochs, Brian Tracy, and Nate Mulherin.

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